Strong. Smart. Beautiful.

U3X-01 BIKE
SERVICE MANUAL

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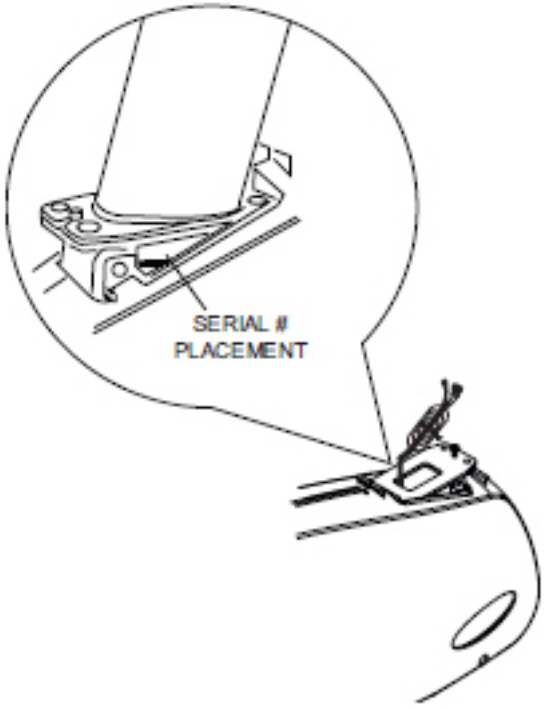
CHAPTER 1: SERIAL NUMBER LOCATION

1.1 SERIAL NUMBER LOCATION



A serial number plate is located below the bottom of the console mast beneath a rubber boot. There is also a serial number tag on the middle of the main frame pointed towards the floor.

CHAPTER 2: IMPORTANT SAFETY INSTRUCTIONS

2.1 READ AND SAVE THESE INSTRUCTIONS

To ensure your safety and protect the equipment, read all instructions before operating the MATRIX U3x-01 Bike.

To ensure proper use of the Matrix U3x-01 Bike, make sure that all users read this manual. Remind the users that before undertaking any fitness program, they should obtain complete physical examinations from their physicians. If, at any time while exercising, the user experiences dizziness, pain, or shortness of breath, nausea or feels faint, he or she must stop immediately.

**** This bike is only to be used for its intended purpose described in this manual. Do not use attachments that have not been recommended by Matrix.***

**** Never drop or insert objects into any opening. Keep hands away from moving parts. If the item cannot be reached, contact a Matrix authorized dealer for assistance.***

**** Never operate the unit if it is damaged, not working properly, when it has been dropped, or has been dropped in water.***

**** Keep hands and feet clear at all times from moving parts to avoid injury.***

**** Do not use this product outdoors, near swimming pools or in areas of high humidity.***

**** Do not operate where aerosol (spray) products are being used or when oxygen is being administered.***

**** Do not use this product in bare feet. Do not wear shoes with heels, leather soles, cleats, or spikes while exercising.***

**** Do not remove the side covers. Service should only be done by an authorized service technician.***

**** Close supervision is necessary when used near children, invalids, or disabled people.***

**** When the bike is in use, young children and pets should be kept at least 3 meters / 10 feet away.***

**** Assemble and operate the bike on a solid, level surface.***

**** Never face backward while using the Matrix U3x-01 Bike.***

**** Use the stationary handlebars when mounting or dismounting the bike.***

**** Do not wear clothing that might catch on any moving parts of this bike.***

CAUTION! ***If you experience chest pains, nausea, dizziness, or shortness of breath, stop exercising immediately and consult your physician before continuing.***

CAUTION! ***Any changes or modifications to this equipment could void the product warranty.***

2.2 ELECTRICAL REQUIREMENTS

The Matrix U3x-01 Bike is designed to be self powered and does not require an external power supply source to operate.

The battery in the console needs to be charged for 3-4 hours when first installed. Until the battery is fully charged, the 30 second pause feature may not function fully. The charging does not need to be continuous for 3-4 hours, but over combined workouts equaling 3-4 hours.

CHAPTER 3: PREVENTATIVE MAINTENANCE

3.1 RECOMMENDED CLEANING TIPS

Preventative maintenance and daily cleaning will prolong the life and look of your MATRIX U3x-01 Bike

Please read and follow these tips.

* Position the equipment away from direct sunlight. The intense UV light can cause discoloration on plastics.
* Locate your equipment in an area with cool temperatures and low humidity.
* Clean with a soft 100% cotton cloth.
* Clean with soap and water or other non-ammonia based all purpose cleaners.
* Wipe seats, pedals, console, heart rate grips, and the handlebar clean after each use.
* Do not pour liquids directly onto your equipment. This can cause damage to the equipment and in some cases electrocution.
* Check pedal straps weekly for wear.
* Adjust leveling feet when equipment wobbles or rocks.
* Maintain a clean area around the equipment, free from dust and dirt.

3.2 CHECK FOR DAMAGED PARTS

DO NOT use any equipment that is damaged or has worn or broken parts. Use only replacement parts supplied by Matrix Fitness Systems.

MAINTAIN LABELS AND NAMEPLATES. Do not remove labels for any reason. They contain important information. If unreadable or missing, contact Matrix Fitness Systems for a replacement at 866-693-4863 or www.matrixfitness.com.

MAINTAIN ALL EQUIPMENT. Preventative maintenance is the key to smoothly operating equipment. Equipment needs to be inspected at regular intervals. Defective components must be kept out of use until they are repaired. Ensure that any person(s) making adjustments or performing maintenance or repair of any kind is qualified to do so. Matrix Fitness Systems will provide service and maintenance training at our corporate facility upon request or in the field if proper arrangements are made.

CHAPTER 3: PREVENTATIVE MAINTENANCE

3.3 CARE AND MAINTENANCE INSTRUCTIONS

In order to maximize life span, and minimize down time, all MATRIX equipment requires regular cleaning, and maintenance items performed on a scheduled basis. This section contains detailed instructions on how to perform these items and the frequency of which they should be done. Some basic tools and supplies will be necessary to perform these tasks which include (but may not be limited to):

* Metric Allen wrenches
* #2 Phillips head screwdriver
* Adjustable wrench
* Torque wrench (capability to read foot lbs and inch lbs)
* Lint free cleaning cloths
* Teflon based spray lubricant such as "Super Lube" or other Matrix approved products.
* Mild water soluble detergent such as "Simple Green" or other Matrix approved products
* Vacuum cleaner with an extendable hose and crevasse tool attachment.

You may periodically see addendums to this document, as the Matrix Technical Support Team identifies items that require specific attention, the latest version will always be available on the Matrix web site at www.matrixfitness.com.

DAILY MAINTENANCE ITEMS

1) Look and listen for loose fasteners, unusual noises, and any other indications that the equipment may be in need of service.

2) Clean the bike before and after each use, including:
a. Use a damp, soft cloth with water or mild liquid detergent to clean all exposed surfaces. DO NOT use ammonia, chlorine, or any acid based cleaners.
b. Keep the console display free of fingerprints and salt build up caused by sweat.

WEEKLY MAINTENANCE ITEMS

1) Frequently vacuum the floor beneath the unit to prevent the accumulation of dust and dirt which can affect the smooth operation of the unit.

2) Check the pedal straps for damage.

3) Clean the grooves on the foot pedals.

MONTHLY MAINTENANCE ITEMS

1) Inspect the console, seat, pedals, and shrouds for damage.

2) Tighten the pedals onto their respective cranks using a 15 mm wrench. NOTE: The left pedal is reverse threaded.

3) Adjust the leveling feet if equipment rocks or wobbles.

QUARTERLY MAINTENANCE ITEMS

1) Remove the front shrouds and check the belt for damage, alignment, and proper tension.

CHAPTER 4: CONSOLE OVERLAY AND WORKOUT DESCRIPTION

4.1 CONSOLE DESCRIPTION

PROGRAM KEYS: Simple program selection buttons make Matrix bikes easy to use. The bike features eight programs.

START / QUICK START: One touch Quick Start and Start any time during preference selection.

UP / DOWN LEVEL: Easy information and level selection.

SELECT / SELECT SCREEN / RESET: This multi-function button enters information when setting up programming options, toggles information displayed and if held down for 5 seconds, resets the bike to Start-up Mode.

4.2 WORKOUT SETUP STEPS - MANUAL

QUICK START - Press to immediately begin a workout. Workout, resistance level, and time will automatically go to default settings. Pressing QUICK START will not prompt user for age, weight, or level settings.

MANUAL - Manual allows the user to input more information while defining their own workout. Calorie expenditure will be more accurate when inputting information in Manual than by pressing QUICK START.

1) Start pedaling, press the MANUAL key.
2) Select Level by using the UP or DOWN LEVEL keys and press SELECT.
3) Select Time by using the UP or DOWN LEVEL keys and press SELECT.
4) Select Weight by using the UP or DOWN LEVEL keys and press SELECT.
5) The display will read Starting 3, Starting 2, Starting 1, and then the program will begin.

4.3 WORKOUT SETUP STEPS - FAT BURN

FAT BURN - Fat burn is a level based program that is designed to help users burn fat through various resistance level changes.

1) Start pedaling and press the FAT BURN key.
2) Select Level by using the UP or DOWN LEVEL keys and press SELECT.
3) Select Time by using the UP or DOWN LEVEL keys and press SELECT.
4) Select Weight by using the UP or DOWN LEVEL keys and press SELECT.
5) The display will read Starting 3, Starting 2, Starting 1, and then the program will begin.

4.4 WORKOUT SETUP STEPS - LEVEL BASED

ROLLING HILLS - The Rolling Hills program is a level based program that automatically adjusts the resistance level to simulate real terrain.

1) Start pedaling and press the ROLLING HILLS key.
2) Select Level by using the UP or DOWN LEVEL keys and press SELECT.
3) Select Time by using the UP or DOWN LEVEL keys and press SELECT.
4) Select Weight by using the UP or DOWN LEVEL keys and press SELECT.
5) The display will read Starting 3, Starting 2, Starting 1, and then the program will begin.

INTERVAL TRAINING - The Interval Training program is a level based program that automatically adjusts the resistance of the machine from low to high intensity settings at regular intervals.

1) Start pedaling and press the INTERVAL TRAINING key.
2) Select Level by using the UP or DOWN LEVEL keys and press SELECT.
3) Select Time by using the UP or DOWN LEVEL keys and press SELECT.
4) Select Weight by using the UP or DOWN LEVEL keys and press SELECT.
5) The display will read Starting 3, Starting 2, Starting 1, and then the program will begin.

RANDOM - Random is a level based workout that randomly adjusts the resistance of the machine.

1) Start pedaling and press the key next to RANDOM key.
2) Select Level by using the UP or DOWN LEVEL keys and press SELECT.
3) Select Time by using the UP or DOWN LEVEL keys and press SELECT.
4) Select Weight by using the UP or DOWN LEVEL keys and press SELECT.
5) The display will read Starting 3, Starting 2, Starting 1, and then the program will begin.

4.5 WORKOUT SETUP STEPS - FITNESS TEST

FITNESS TEST -The Cooper Fitness Test measures cardiovascular fitness and proves an estimated sub-maximal VO2 result. It is based on power output according to ACSM standards and was developed by the Cooper Institute© (www.cooperinstitute.org). User RPMs must remain between 60-80 RPM during the test. The test will end when the user can no longer maintain this speed. Use of a heart rate strap is optional but provides more data.

The test starts at a low intensity level and gradually increases in intensity (difficulty) every 2 minutes. As it increases, the user must maintain 60-80 RPM to advance to the next level. The test could take upwards of 30+ minutes for very fit individuals. Once the test ends a recovery period (cool down) will begin and the user's results are calculated and displayed. Results are based on the number of stages completed.

1) Start pedaling and press the FITNESS TEST key.
2) Select Age by using the UP or DOWN LEVEL keys and press SELECT.
3) Select Gender by using the UP or DOWN LEVEL keys and press SELECT.
4) Select Weight by using the UP or DOWN LEVEL keys and press SELECT.
5) The display will read Starting 3, Starting 2, Starting 1, and then the program will begin.
6) Once the workout is complete, the display will read the results of the Fitness Test.

PERCENTILE VALUES FOR MAXIMAL AEROBIC POWER

AGE

PERCENTILE	*20-29*	*30-39*	*40-49*	*50-59*	*60+*
MEN					
90	51.4	50.4	48.2	45.3	42.5
80	48.2	46.8	44.1	41.0	38.1
70	46.8	44.6	41.8	38.5	35.3
60	44.2	42.4	39.9	36.7	33.6
50	42.5	41.0	38.1	35.2	31.8
40	41.0	38.9	36.7	33.8	39.2
30	39.5	37.4	35.1	32.3	28.7
20	37.1	35.4	33.0	30.2	26.5
10	34.5	32.5	30.9	28.0	23.1
WOMEN					
90	44.2	41.0	39.5	35.2	35.2
80	41.0	38.6	36.3	32.3	31.2
70	38.1	36.7	33.8	30.9	29.4
60	36.7	34.6	32.3	29.4	27.2
50	35.2	33.8	30.9	28.2	25.8
40	33.8	32.3	29.5	26.9	24.5
30	32.3	30.5	28.3	25.5	23.8
20	30.6	28.7	26.5	24.3	22.8
10	28.4	26.5	25.1	22.3	20.8

4.6 WORKOUT SETUP STEPS - TARGET HEART RATE

TARGET HEART RATE - The Matrix U3x-01 Bike comes with standard digital contact heart rate sensors and are POLAR telemetry compatible. The heart rate control workout mode allows the user to program their desired heart rate zone, and the bike will automatically adjust the level based upon the user's heart rate. The heart rate zone is calculated using the following equation: (220-Age)8%=target heart rate zone. The user must wear a POLAR telemetric strap or continually hold onto the contact heart rate grips for this workout.

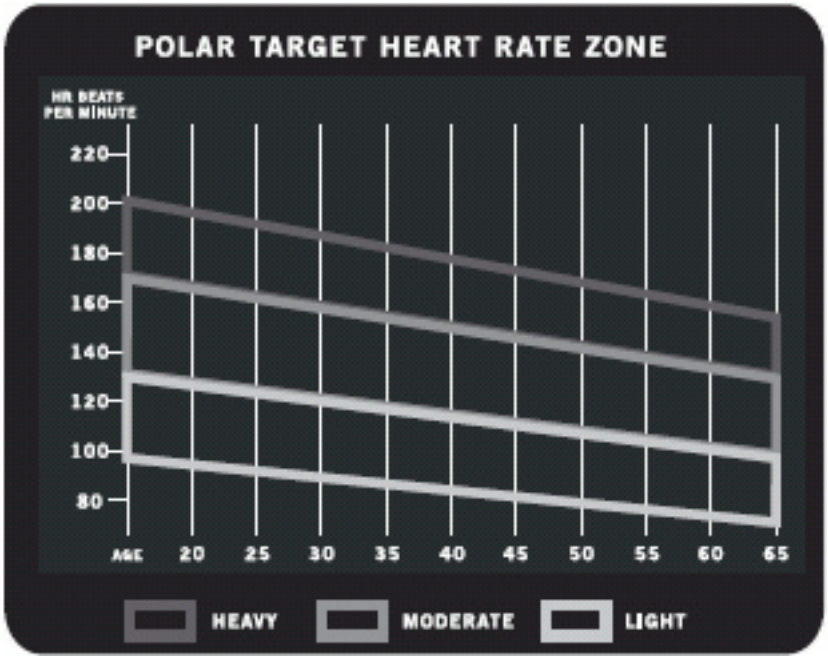
Locate the metal sensors on the handlebars of the bike. Notice that there are two separate pieces of metal on each grip. You must be making contact with both pieces of each grip to get an accurate heart rate reading. You can grab these sensors in any program to view your current heart rate.

1) Start pedaling and press the HEART RATE key.
2) Select Age by using the UP or DOWN LEVEL keys and press SELECT.
3) Select Target HR Percentage by using the UP or DOWN LEVEL keys and press SELECT.
4) Select Time by using the UP or DOWN LEVEL keys and press SELECT.
5) Select Weight by using the UP or DOWN LEVEL keys and press SELECT.
6) The display will read Starting 3, Starting 2, Starting 1, and the program will begin.

4.7 WORKOUT SETUP STEPS - CONSTANT WATTS

CONSTANT WATTS - Constant Watts is a unique program that allows you to vary your cadence or RPM and the bike's resistance level will adjust accordingly to your selected goal. The quicker you pedal, the less resistance for the goal selected.

1) Start pedaling and press the CONSTANT WATTS key.
2) Select Watts by using the UP or DOWN LEVEL keys and press SELECT.
3) Select Time by using the UP or DOWN LEVEL keys and press SELECT.
4) Select Weight by using the UP or DOWN LEVEL keys and press SELECT.
5) The display will read Starting 3, Starting 2, Starting 1, and the program will begin.



CHAPTER 5: MANAGER MODE

5.1 USING MANAGER MODE

The Manager's Custom Mode allows the club owner to customize the bike for the club.

1) To enter Manager Mode, press and hold down the UP and DOWN LEVEL keys. Continue to hold down these two keys until the display reads Manager Mode and hit SELECT (Figure A).

2) To scroll through the list of options in Manager Mode, use the UP and DOWN LEVEL keys. Each of the custom settings will show on the display.

3) To select a custom setting, press the SELECT key when the desired setting is shown.

4) To change the value of the setting, use the UP and DOWN LEVEL keys.

5) To confirm and save the value of the setting, press the START key.

6) Press the START key 2 times to return to normal operation.

CHAPTER 5: MANAGER MODE

5.2 MANAGER MODE OVERVIEW

CUSTOM SETTING	DEFAULT	MINIMUM	MAXIMUM	DESCRIPTION
Maximum Time	95 min	10 min	95 min	Sets the total run time of any program.
Default Time	20 min	10 min	Maximum Time Setting	Workout time when GO is pressed or when no time is selected during program set up.
Default Level	1	1	20	Starting resistance when GO is pressed or when no resistance is selected during program set up.
Default Weight	150 lbs / 75 kg	80 lbs / 36 kg	400 lbs / 181 kg	Weight used for program calorie expenditure calculations.
Speed / Distance Mode	Mile	Mile	Kilometer	Displays distance in miles or kilometers.
Machine	Bike (BI)	Elliptical (EL)	Bike (BI)	This should be set for bike (BI) at all times.
Cardio	On	Off	On	This turns the cardio port on or off.
Accumulated Distance*	N/A	0	65,000 Miles	Total distance for all programs.
Accumulated Time*	N/A	0	65,000 hours	Total time for all programs displayed in hours.
Language	English	English	English	Sets the language for the console. Select between English, German, Dutch, Italian, French, Spanish, and Portuguese.
Software Version	N/A	N/A	N/A	Current version of console software.

*NOTE - TO RESET ACCUMULATED DISTANCE OR TIME:

1) Enter Manager Mode
2) Select P7 or P8.
3) Press and hold the MANUAL and RANDOM keys together for 5 seconds.

CHAPTER 6: ENGINEERING / SERVICE MODE

6.1 ENGINEERING / SERVICE MODE OVERVIEW

To enter Engineering or Service Mode, hold the UP and DOWN LEVEL keys for 3 seconds until Manager Mode appears on the middle LED display. Press the UP or DOWN LEVEL key to scroll between the different Engineering and Service Modes.

ENGINEERING MODE

This mode is for factory settings only.

SERVICE MODE

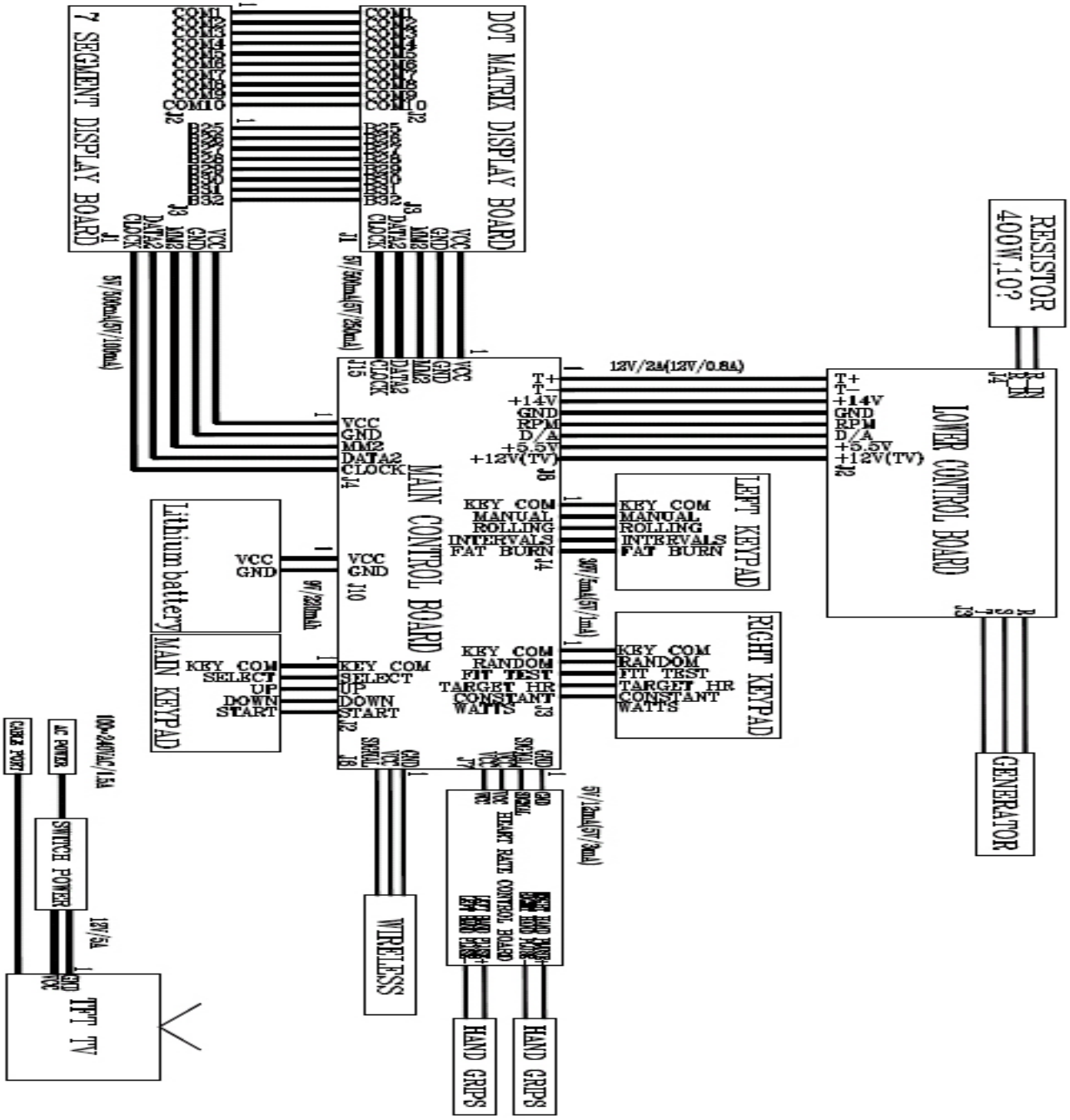
SERVICE 1: Display Test.

SERVICE 2: RPM Reading.

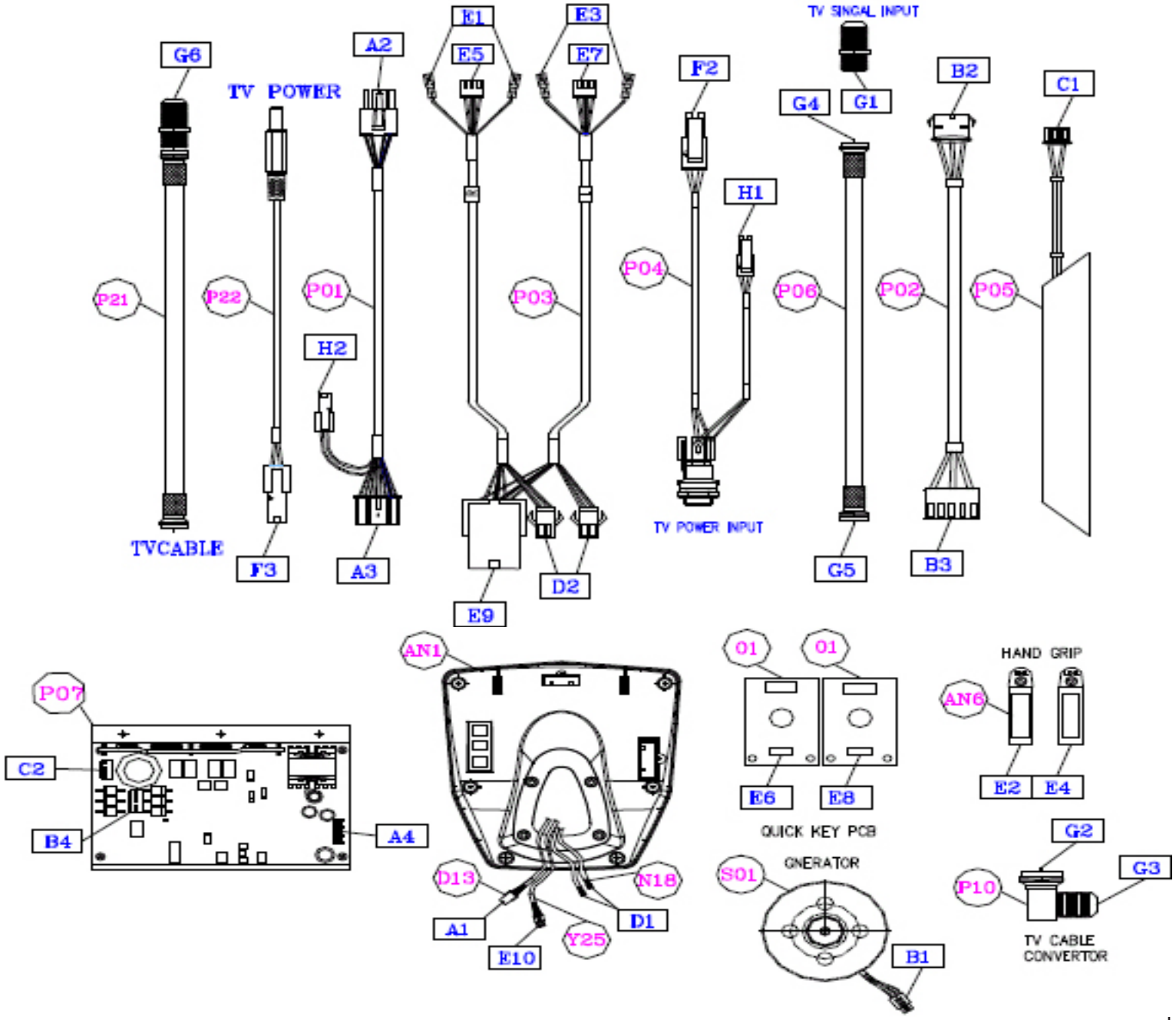
SERVICE 3: Accumulated Distance and Time.

SERVICE 4: Heart Rate Test.

7.1 ELECTRICAL DIAGRAMS

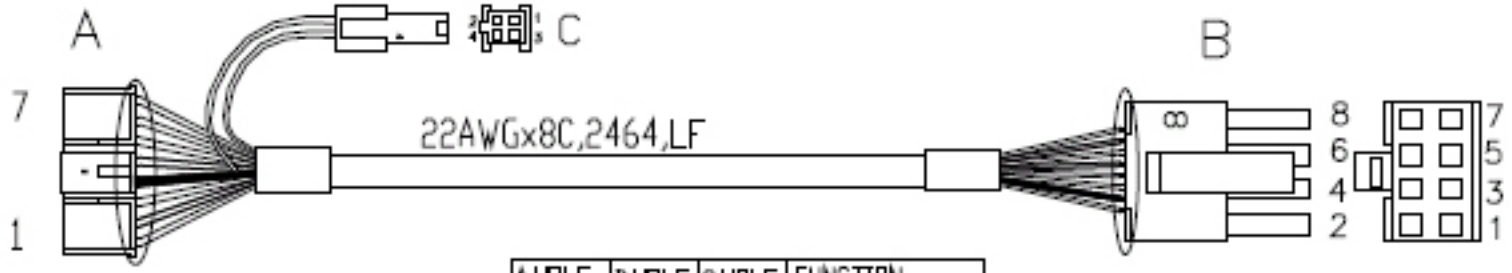


7.1 ELECTRICAL DIAGRAMS



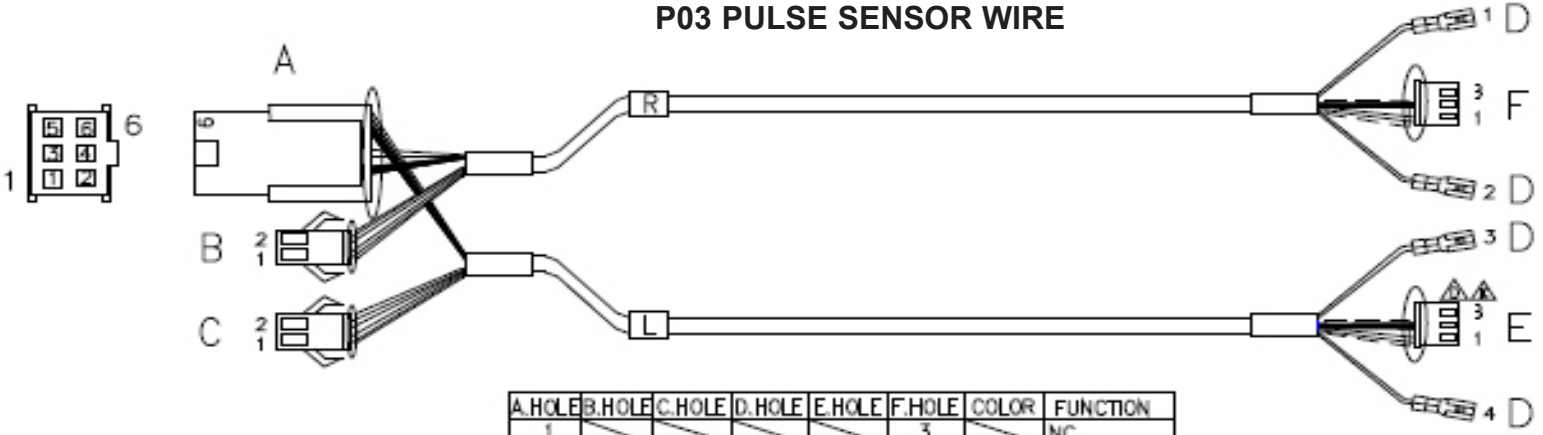
7.1 ELECTRICAL DIAGRAMS

P01 CONSOLE CABLE



A.HOLE	B.HOLE	C.HOLE	FUNCTION
1	1		T+
2	2		T-
3	3		14V
4	4	2	GND+(Shielding)
5	5		RPM
6	6		D/A
7	7		+5.5V
	8	3	+12V(TV)
		1,4	NC

P03 PULSE SENSOR WIRE



A.HOLE	B.HOLE	C.HOLE	D.HOLE	E.HOLE	F.HOLE	COLOR	FUNCTION
1					3		NC
2					2		GND(Shielding)
3					1		UP
	1		1				Right Hand Pulse+
	2		2				Right Hand Pulse-
4				3			NC
5				2			GND(Shielding)
6				1			DOWN
		1	3				Left Hand Pulse+
		2	4				Left Hand Pulse-

7.2 TROUBLESHOOTING - KEYPAD ISSUES

ALL OR SOME OF THE FUNCTION KEYS DO NOT RESPOND

POSSIBLE CAUSES:

1) The keypad connection ribbon cable has not been plugged in correctly.
2) The keypad is damaged.
3) The console is damaged.

SOLUTION:

1) Check the connections of the keypad at the UCB.
   a. Remove the console from the console mast.
   b. Remove the 6 screws holding the back of the console to the front (Figure A).
   c. Inspect the keypad ribbon cable connection at the UCB (Figure B).
   d. Even if the keypad ribbon cable appears to be connected correctly, unplug and re-seat the cable, then retest.

2) Replace the affected keypad.

3) Replace the console.

FIGURE A

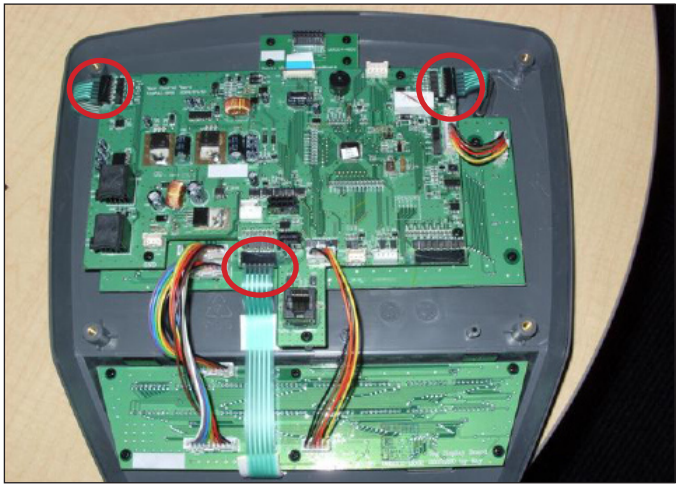


FIGURE B

HIGH OR NO RESISTANCE

POSSIBLE CAUSES:

1) The console cable is damaged or not properly plugged in.
2) The Upper Control Board is damaged.
3) The Generator is damaged.
4) The Lower Control Board is damaged.

SOLUTION:

1) Check the console cable connections at the UCB and LCB.

2) Check if the generator is outputting variable power:
   a. Insert the probes from a multi-meter into the black and red wires on the generator wire harness connector (Figure A).
   b. When pedaling, the output voltage from the generator should vary depending on the RPM. The generator should output 120 VAC at 94 RPM.

3) If the generator does not have variable power, replace the generator.

4) If the generator does have variable power, replace the LCB.

5) If both the generator and LCB have been replaced and the issue is still present, replace the console.

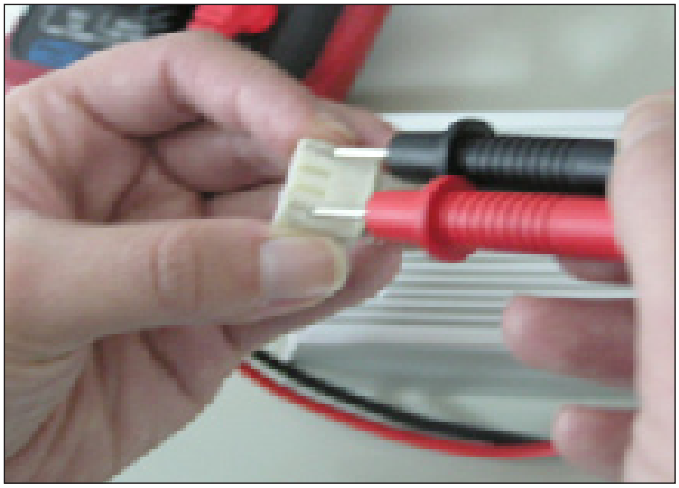


FIGURE A

PEDALS SLIPPING

POSSIBLE CAUSES:

1) The belt tension is not enough.
2) The one way bearing is damaged.

SOLUTION:

1) Remove the covers and check the belt tension.
   a. Tighten the drive belt tension if needed by moving the spring tension clip to another hole.
   b. The Generator belt should be tightened to 85 ft / lbs.

2) If the belts are tensioned correctly, the one way bearing is damaged, replace the drive assembly.

KNOCKING OR CREAKING NOISE

POSSIBLE CAUSES:

1) The pedal is on the crank too loosely.
2) The crank or axle is worn out.
3) The belt tension is not enough, or the belts are too dirty.

SOLUTION:

1) Retighten the pedal on the crank.

2) Replace the crank or axle as needed.

3) Remove the covers and check the belt tension.
   a. Tighten the drive belt tension if needed by moving the spring tension clip to another hole.
   b. The Generator belt should be tightened to 85 ft / lbs.

4) Clean the belts. If they are worn or will not clean, replace the belts.

7.6 TROUBLESHOOTING - CONSOLE ISSUES

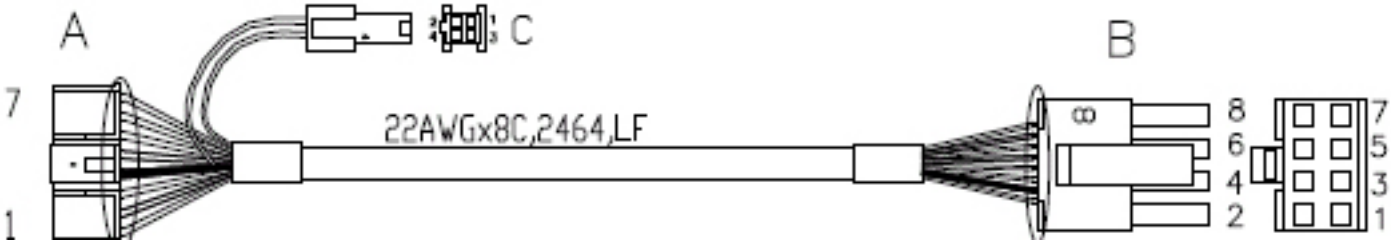
NO DISPLAY ON THE CONSOLE OR THE CONSOLE IS DIM

POSSIBLE CAUSES:

1) The console cable is damaged or not properly connected.
2) Poor connection to the terminals on the console.
3) The console is damaged.
4) The generator is damaged.

SOLUTION:

1) Unplug the console cable at the console and use a multi-meter to check if the voltage between pin 7 (Vcc) and pin 4 (Ground) of the console cable is greater than 5.5 Volts DC. If it is, replace the console.



2) If no voltage is present in Step 1, check the console cable connection at the lower control board. Also check for any pinches or cuts in the console cable.

3) Check if the generator is outputting variable power:
   a. Insert the probes from a multi-meter into the black and red wires on the generator wire harness connector (Figure A).
   b. When pedaling, the output voltage from the generator should vary depending on the RPM. The generator should output 120 VAC at 94 RPM.
   c. If the generator is not outputting variable power, replace the generator.
   d. If the generator is outputting variable power, replace the .... lower control board.

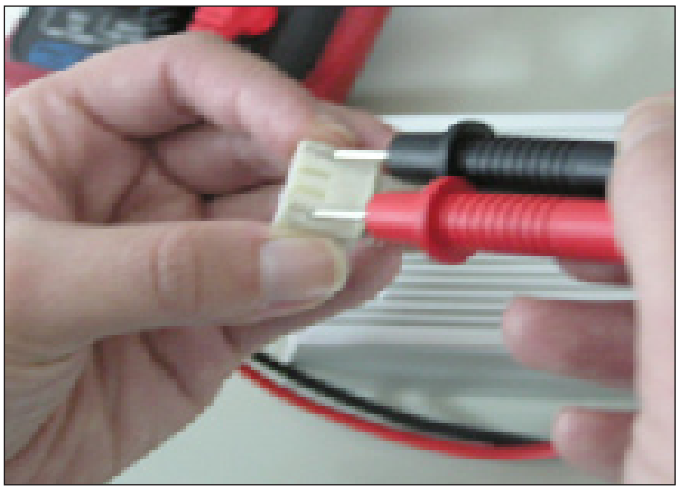


FIGURE A

NO RPM IS DISPLAYED DURING EXERCISE

POSSIBLE CAUSES:

1) The console cable is damaged or not properly connected.
2) The console is damaged.
3) The lower control board is damaged.

SOLUTION:

1) Remove the console and check to see if the console cable is connected properly.

2) Check to see if the console cable is pinched or cut, replace as needed.

3) Replace the console.

4) Replace the lower control board.

7.8 TROUBLESHOOTING - HEART RATE ISSUES

HEART RATE FUNCTION DOES NOT WORK OR IS READING INCORRECTLY

POSSIBLE CAUSES:

1) The chest strap being used is not making good contact with the user's chest.
2) The chest strap is at a low battery status.
3) The chest strap is damaged.
4) The HR grips are damaged.
5) The HR board is damaged.
6) The UCB is damaged.

SOLUTION:

1) Re-center the chest strap below the user's pectoral muscle (Figure A) and check again.

2) Replace the battery in the chest strap.

3) Replace the chest strap.

4) If there is no HR present, replace the HR grips.

5) If there is a HR present but it is much higher than normal, replace the HR board.

6) If replacing the HR grips and board does not resolve the issues, replace the console.

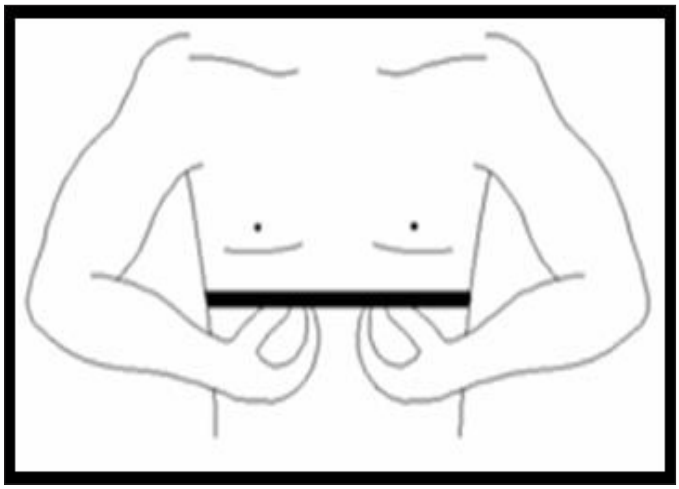


FIGURE A

CHAPTER 8: PART REPLACEMENT GUIDE

8.1 CONSOLE REPLACEMENT

1) Remove the 4 screws holding the console to the frame (Figure A).
2) Disconnect the console cable and HR connections from the defective console and remove the console (Figure B).
3) Reinstall the wire connections to the new console.
4) Carefully push the wires into the console and mast until they are clear of the console / mast connection and attach the console to the mast using the 4 screws.
5) Test the bike for function as outlined in Section 8.20.

FIGURE A

FIGURE B

8.2 HEART RATE HANDLEBAR REPLACEMENT

1) Remove the 2 screws holding on the handlebar cover (Figures A & B).
2) Remove the 4 screws holding the heart rate handlebar to the console mast being careful to support the handlebar (Figure C).
3) Carefully pull the wires from the console mast until the connectors are showing, and then disconnect the 3 wires from the handlebar and remove the defective handlebar (Figure D).
4) Reverse Steps 1-3 to install a new handlebar.
5) Test the bike for function as outlined in Section 8.20.

FIGURE A

FIGURE B

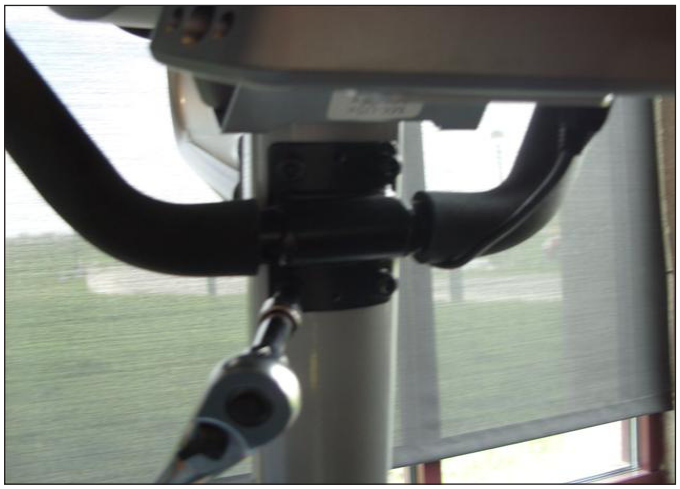


FIGURE C

FIGURE D

8.3 HEART RATE GRIPS REPLACEMENT

1) Remove the 3 screws holding the HR grip together (Figure A).
2) Pull the 2 halves of the HR grip apart (Figure B).
3) Disconnect the black wire and remove the lower portion of the HR grip (Figure C).
4) Disconnect the red wire and level button and remove the upper portion of the HR grip (Figure D).
5) Reverse Steps 1-4 to install new HR grips.
6) Test the bike for function as outlined in Section 8.20.

FIGURE A

FIGURE B

FIGURE C

FIGURE D

8.4 CUP HOLDER REPLACEMENT

1) Locate the cup holder on the back of the console (Figure A).
2) Pull up and remove the cup holder (Figure B).
3) Reverse Steps 1-2 to install a new cup holder.

FIGURE A

FIGURE B

8.5 CONSOLE KEYPAD / OVERLAY REPLACEMENT

1) Remove the console as outlined in Section 8.1.
2) Remove the back cover of the console (Figure A).
3) Unplug and remove the faulty overlay (Figure B).
4) Clean the console area with alcohol to remove any left over adhesive (Figure C).
5) Remove the protective film over the display window of the overlay (Figure D).
6) Peel part of the protective film from the back of the overlay (Figure E).
7) Push the overlay ribbon cable through the hole in the console and plug it in (Figure F).
8) Match the overlay to the cutout on the console (Figure G).
9) Press down on the corners of the overlay to keep it in place, then remove the protective film (Figure H & I).
10) Once the overlay is in the correct position, press down on the overlay with a cloth to adhere it to the console plastic (Figure J).
11) Use the same procedure to replace any additional faulty overlays. NOTE: Overlays can not be reused.
12) Test the bike for function as outlined in Section 8.20.

FIGURE A

FIGURE B

FIGURE C

FIGURE D

8.5 CONSOLE KEYPAD / OVERLAY REPLACEMENT - CONTINUED

FIGURE E

FIGURE F

FIGURE G

FIGURE H

FIGURE I

FIGURE J

8.6 CONSOLE MAST REMOVAL

1) Remove the console as outlined in Section 8.1.
2) Remove the HR handlebars as outlined in Section 8.2.
3) Lift up the rubber boot at the bottom of the console mast (Figure A), and remove the 4 screws holding the console mast to the frame (Figure B).
4) Pull the wires out the bottom of the console mast and remove the mast (Figure C).
5) When installing a new console mast, be sure to pull the console wires up through the new mast prior to installing the 4 screws into the frame.
6) Test the bike for function as outlined in Section 8.20.

FIGURE A

FIGURE B

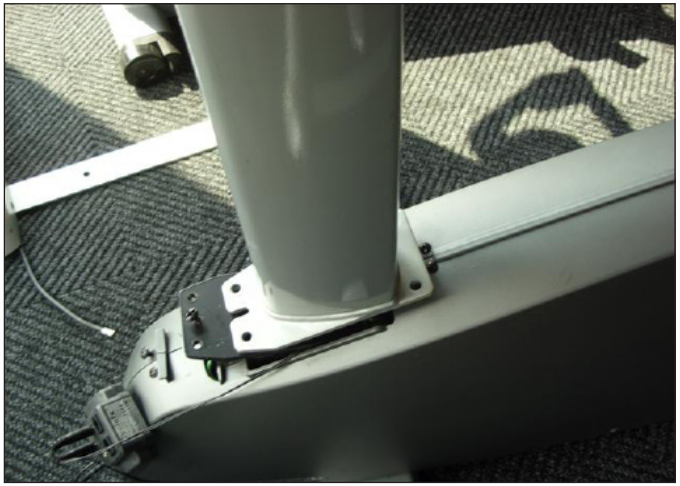


FIGURE C

8.7 SEAT PAD REPLACEMENT

1) Remove the 4 screws holding the seat pad to the seat post (Figure A).
2) Lift the seat pad away from the seat post (Figure B).
3) Reverse Steps 1-2 to install a new seat pad.

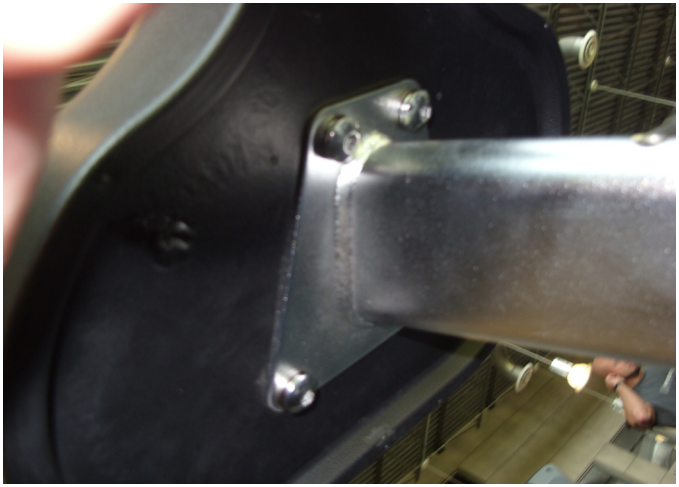


FIGURE A

FIGURE B

8.8 SEAT POST REPLACEMENT

1) Remove the seat adjustment pin (Figure A).
2) Pull the seat post upward until the stem comes away from the frame (Figure B).
3) Remove the 4 nuts holding the seat pad to the seat post and remove the seat pad (Figure C).
4) Reverse Steps 1-3 to install a new seat post.

FIGURE A

FIGURE B

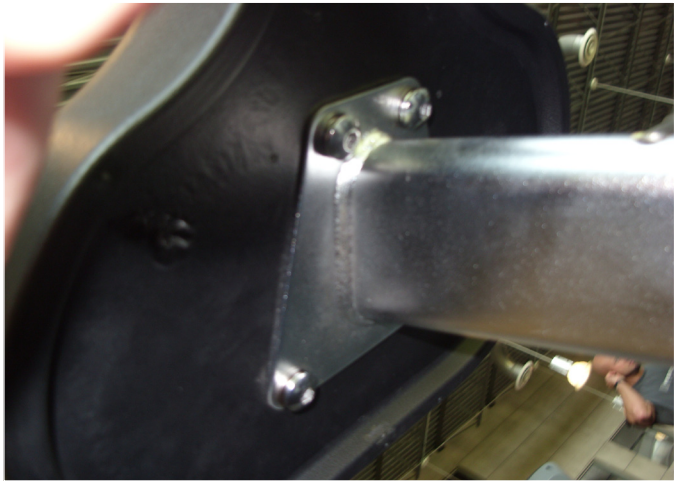


FIGURE C

8.9 SEAT POST INSERT REPLACEMENT

1) Remove the seat adjustment pin (Figure A).
2) Pull the seat post upward until the stem comes away from the frame and set it aside (Figure B).
3) Remove the rubber boot that rests at the bottom of the seat post (Figure C).
4) Grab the lip of the seat post insert and remove it from the seat post (Figure D).
5) Reverse Steps 1-4 to install a new seat post insert.

FIGURE A

FIGURE B

FIGURE C

FIGURE D

8.10 PEDAL REPLACEMENT

1) Use a 15 mm wrench to remove the pedal from the crank (Figure A). NOTE: For the right side pedal, the threads are normal. For the left side pedal, the threads are reversed (the pedal turns off counterclockwise).
2) Remove the pedal (Figure B).
3) Reverse Steps 1-2 to install a new pedal.

FIGURE A

FIGURE B

8.11 SHROUDS REMOVAL

1) Remove the pedals as outlined in Section 8.10.
2) Remove the seat adjustment pin (Figure A).
3) Remove the seat post and seat post boot (Figures B & C).
4) Remove the 13 screws holding the left shroud in place (Figure D).
5) Remove the 13 screws holding the right shroud in place (Figure E).
6) Once the screws are removed from both side shrouds, lift the shrouds away from the frame. NOTE: You will need to angle the shroud so that the crank passes through the hole in the shroud.

FIGURE A

FIGURE B

FIGURE C

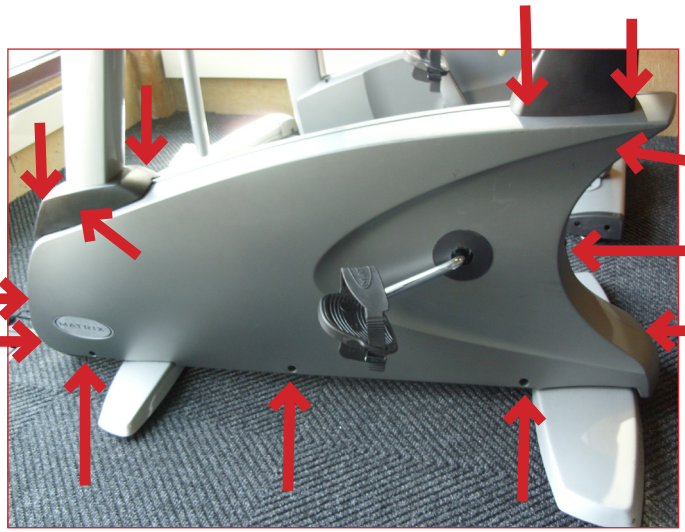


FIGURE D

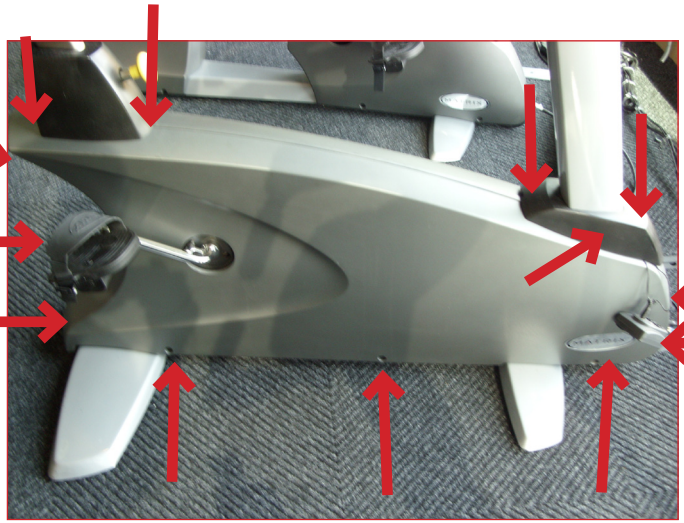


FIGURE E

8.12 LOWER CONTROL BOARD REPLACEMENT

1) Remove the shrouds as outlined in Section 8.11.
2) Remove the 3 screws holding the cover onto the lower board and remove the cover (Figure A).
3) Disconnect the 3 wire connections to the lower board (Figure B).
4) Remove the 2 screws holding the lower board to the frame (Figure C), and remove the lower board.
5) Reverse Steps 1-4 to install a new lower board.
6) Test the bike for function as outlined in Section 8.20.

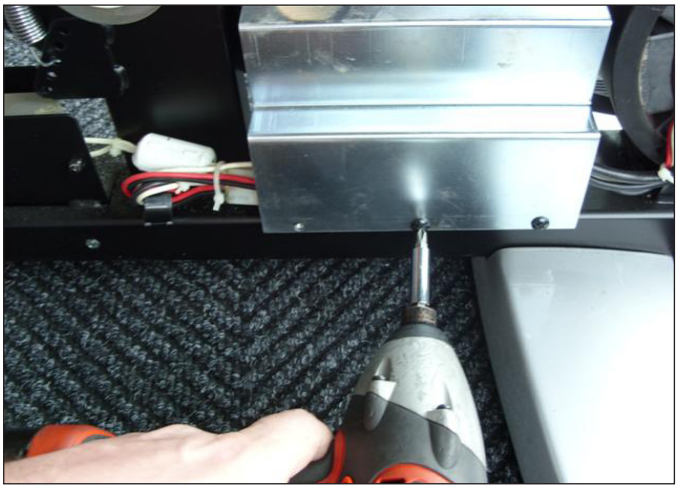


FIGURE A

FIGURE B

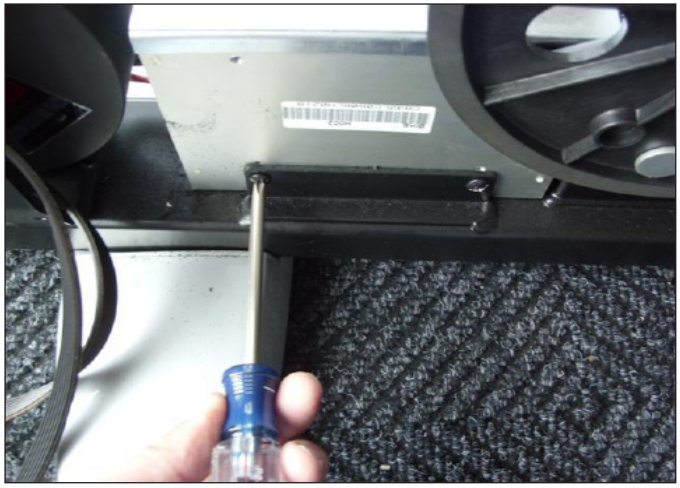


FIGURE C

8.13 DRIVE BELT REPLACEMENT

1) Remove the right side shroud as outlined in Section 8.11.
2) Pull up on the tension assembly and walk the belt off of the pulley (Figure A).
3) Remove the belt (Figure B).
4) Reverse Steps 1-3 to install a new drive belt. NOTE: Be sure to reattach the tension spring (Figure C). If more tension is needed on the drive belt, multiple holes are available for the lower spring attachment (Figure D).
5) Test the bike for function as outlined in Section 8.20.

FIGURE A

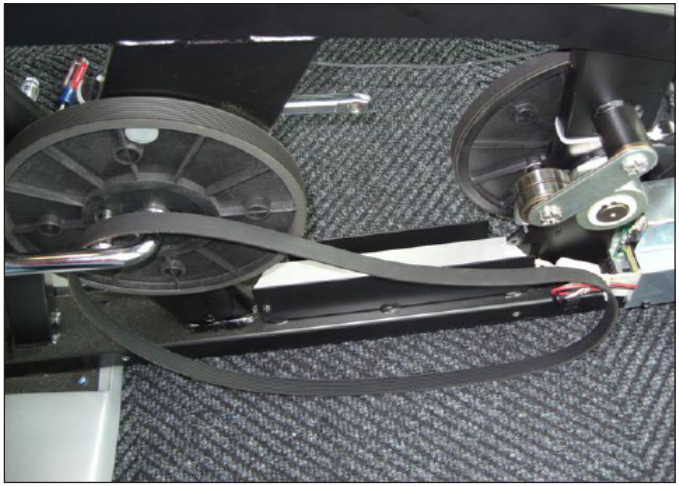


FIGURE B

FIGURE C

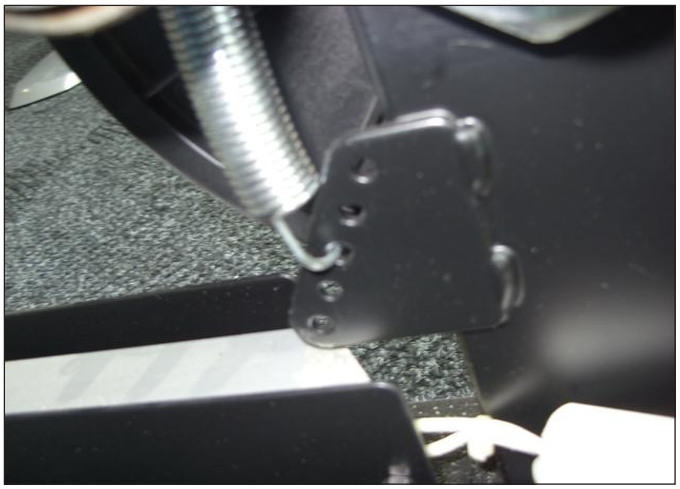


FIGURE D

8.14 GENERATOR BELT REPLACEMENT

1) Remove the shrouds as outlined in Section 8.11.
2) Loosen the nuts holding the Generator to the frame (Figure A), and remove the nuts putting tension on the Generator belt (Figure B).
3) Once the tension has been removed, the Generator belt can be walked off of the pulley (Figure C).
4) Pull the Generator out of the frame towards the front of the unit, and remove the Generator belt (Figure D).
5) Reverse Steps 1-4 to install a new Generator belt. NOTE: Be sure to re-tension the new Generator belt to 80 ft / lbs of torque.
6) Test the bike for function as outlined in Section 8.20.

FIGURE A

FIGURE B

FIGURE C

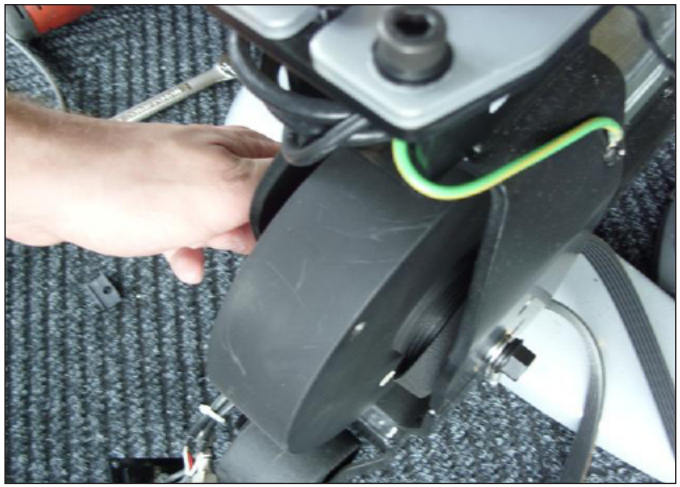


FIGURE D

8.15 GENERATOR REPLACEMENT

1) Remove the shrouds as outlined in Section 8.11.
2) Remove the nuts holding the Generator to the frame (Figure A), and remove the nuts putting tension on the Generator belt (Figure B).
3) Once the tension has been removed, the Generator belt can be walked off of the pulley (Figure C).
4) Pull the Generator out of the frame towards the front of the unit, and remove the Generator belt (Figure D).
5) Reverse Steps 1-4 to install a new Generator.
6) Test the bike for function as outlined in Section 8.20.

FIGURE A

FIGURE B

FIGURE C

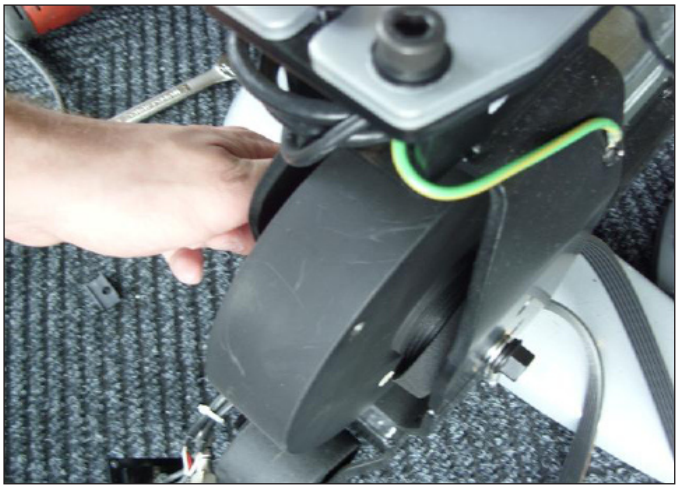


FIGURE D

8.16 PULLEY AXLE SET REPLACEMENT

1) Remove the shrouds as outlined in Section 8.11.
2) Remove the drive belt as outlined in Section 8.13.
3) Loosen the nuts holding the Generator to the frame (Figure A), and remove the nuts putting tension on the Generator belt (Figure B).
4) Once the tension has been removed, walk the Generator belt off of the pulley (Figure C).
5) Remove the C-clip holding the bearing in place on the right side of the frame (Figure D).
6) Remove the bearing (Figure E).
7) Remove the 60 mm nut holding in the pulley axle assembly with a large channel lock pliers or a pipe wrench (Figure F).
8) Once the 60 mm nut is removed, the pulley axle set can be removed from the left side of the frame (Figure G).
9) Reverse Steps 1-8 to install a new pulley axle set.
10) Test the bike for function as outlined in Section 8.20.

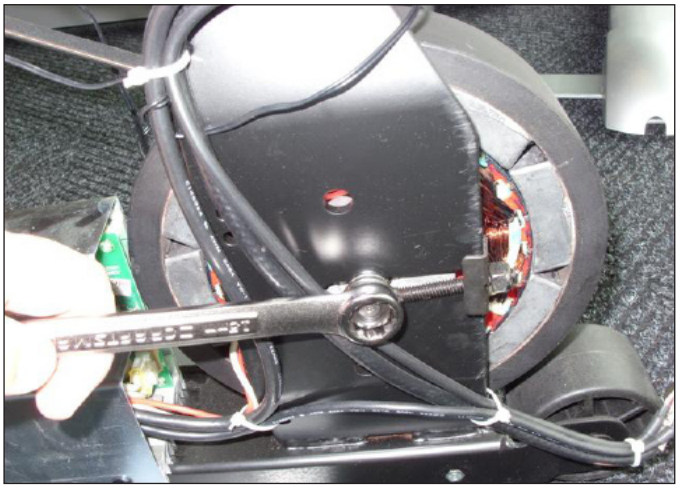


FIGURE A

FIGURE B

FIGURE C

8.16 PULLEY AXLE SET REPLACEMENT - CONTINUED

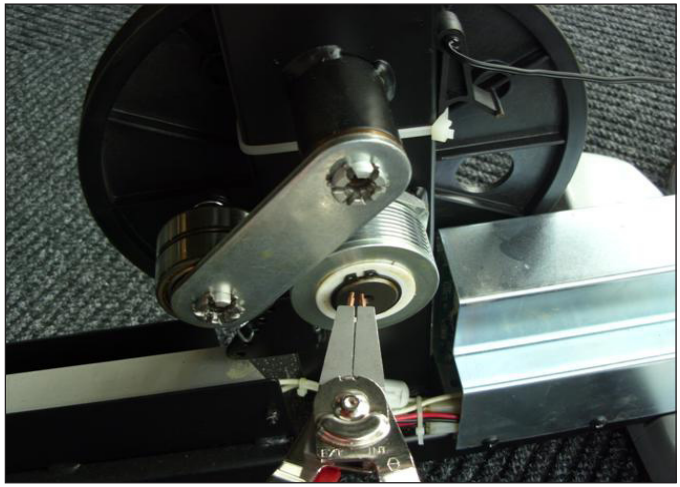


FIGURE D

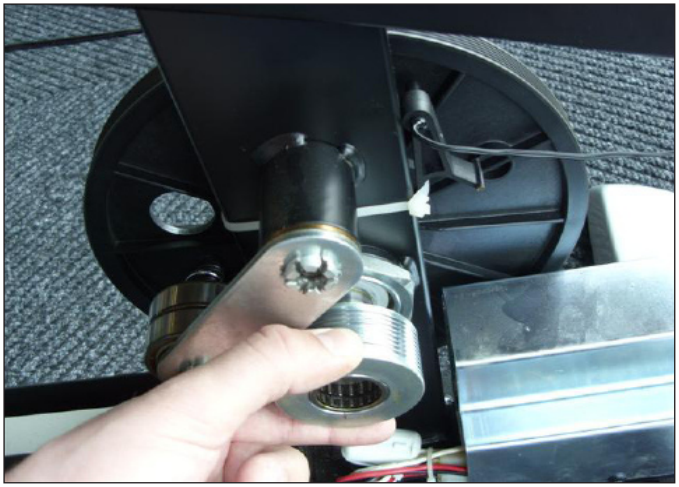


FIGURE E

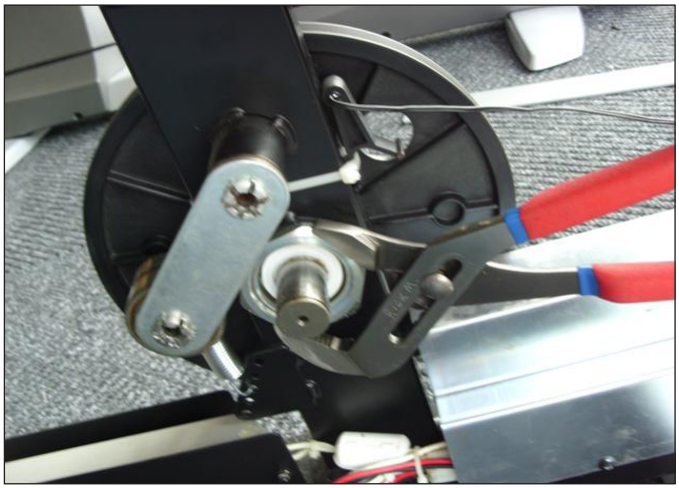


FIGURE F

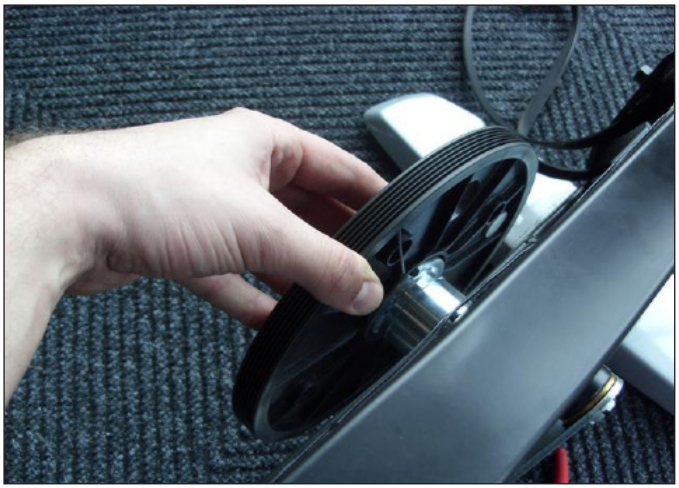


FIGURE G

8.17 CRANK AXLE SET REPLACEMENT

1) Remove the shrouds as outlined in Section 8.11.
2) Pull up on the tension assembly and walk the drive belt off of the pulley (Figure A).
3) Remove the drive belt (Figure B).
4) Remove the 3 screws holding the crank axle bearings in place on both sides (Figure C).
5) Bend the tabs of the nut on the left side of the frame so that this nut will turn (Figure D).
6) Use a 32 mm wrench to remove the crank axle nuts (Figure E). NOTE: This nut is reverse threaded.
7) Once the nuts are removed, the crank axle can be removed from the frame from the right side.
8) Reverse Steps 1-7 to install a new crank axle set.
9) Test the bike as outlined in Section 8.20.

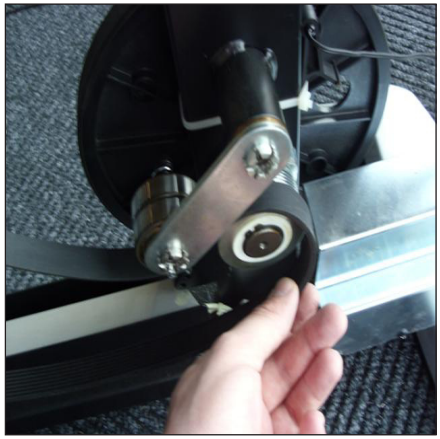


FIGURE A

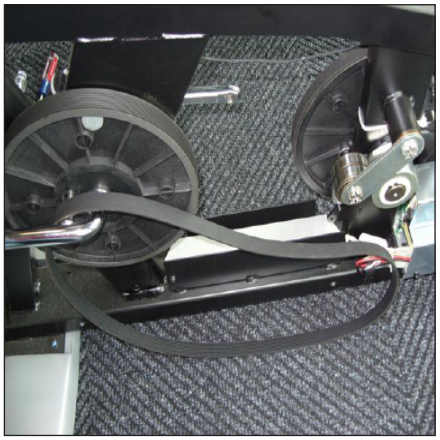


FIGURE B

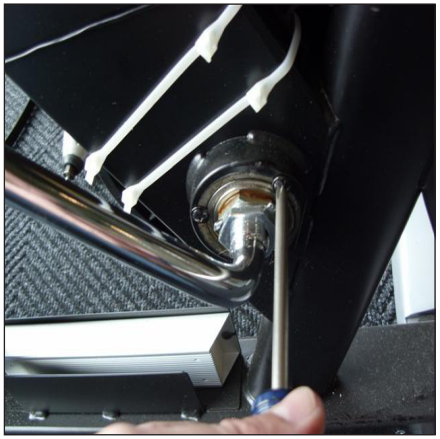


FIGURE C

FIGURE D

FIGURE E

8.18 REAR STABILIZER REPLACEMENT

1) Lean the bike to one side and remove the 4 screws holding the rear stabilizer to the frame (Figure A).
2) Remove the rear stabilizer (Figure B).
3) Reverse Steps 1-2 to install a rear stabilizer.

FIGURE A

FIGURE B

8.19 FRONT STABILIZER REPLACEMENT

1) Lean the bike to one side and remove the 4 screws holding the front stabilizer to the frame (Figure A).
2) Remove the front stabilizer (Figure B).
3) Reverse Steps 1-2 to install a new front stabilizer.

FIGURE A

FIGURE B

8.20 TESTING THE BIKE

ONCE THE UNIT OR REPLACEMENT PART IS FULLY INSTALLED AND ASSEMBLED AND PROPERLY PLACED ON THE FLOOR, USE THE FOLLOWING INSTRUCTIONS TO SETUP AND TEST THE MACHINE:

1) Check that the console is set for bike.
   a. Press and hold both LEVEL keys until Manager Mode appears on the display and press SELECT.
   b. Use the UP or DOWN LEVEL keys to scroll to Machine.
   c. Press SELECT when the display says Machine and make sure it is set for Bike (BI).
   d. If Machine is not set for Bike (BI), change to BI using the UP or DOWN LEVEL key and press START to save.
   e. Press the START key twice to return to normal function.

2) Without hitting start or entering any program modes, sit on the bike and hold the handlebars while pedaling to simulate exercising. While moving, listen for any odd noises or squeaks.

3) After stopping movement, press the START key and begin pedaling.

4) Grasp the hand grips to check for proper heart rate response.

5) Press the level up and down buttons on the console and hand grips to make sure resistance is fully functional.

6) If everything functions properly, stop pedaling and the unit will reset to normal operation within 30 seconds.

CHAPTER 9: BIKE SPECIFICATIONS AND ASSEMBLY GUIDE

9.1 U3x-01 BIKE SPECIFICATIONS

SPECIFICATIONS	
Display Type	Dot-Matrix LED
Programs	Manual, Rolling, Intervals, Fat Burn, Random, Fitness Test, Target HR, Constant Watts
Resistance Levels	25
Coaxial Cable Connection	Yes
AC TV Power Connection	Yes
Monitor Mount	Yes
Resistance Type	Generator
Power Requirements0	Self Powered
Overall Dimensions (L x W x H)	47" x 29" x 56" / 119.4 x 73.5 x 142.2 cm
Maximum User Weight	400 lbs / 181.4 kg
Unit Weight	129 lbs / 59 kg
Transport Wheel	Yes
Contact Heart Rate Sensors	Yes
Telemetric Heart Rate Receiver	Yes
Handle Bar Design	Full racing style with elbow support.
Thumb Switch Controls	Yes

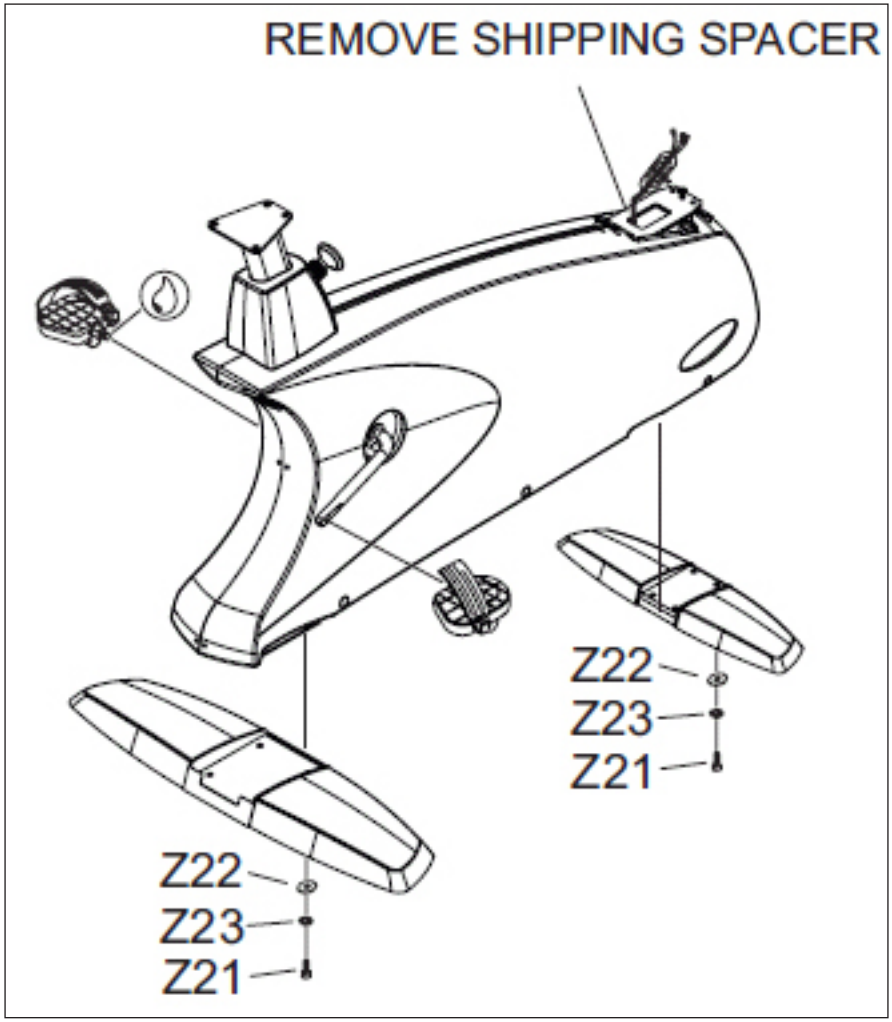
9.2 FASTENERS AND ASSEMBLY TOOLS

QUANTITY	PART #	SKETCH	DESCRIPTION	NOTES
1			4 MM ALLEN WRENCH	PURPLE
1			5MM ALLEN WRENCH	PURPLE
1			6 MM ALLEN WRENCH	PURPLE
1			OPEN END WRENCH (15 & 17MM)	PURPLE
1			#2 PHILLIPS SCREWDRIVER	PURPLE
4	Z11		HEX HEAD SCREW (M8 X 25L)	WHITE
4	Z12		SPRING WASHER	WHITE
2	Z13		BUTTON HEAD SCREW (M5 X 10L)	WHITE
8	Z21		HEX HEAD SCREW (M8 X 20L)	BLACK
8	Z22		FLAT WASHER	BLACK
8	Z23	See sketch of part Z12	SPRING WASHER	BLACK
4	Z31		BUTTON HEAD SCREW (M8 X 20L)	YELLOW
4	Z32	See sketch of part Z12	SPRING WASHER	YELLOW
4	Z33	See sketch of part Z22	FLAT WASHER	YELLOW
2	Z34	See sketch of part Z11	HEX HEAD SCREW (M8 X 25L)	YELLOW
4	Z41	See sketch of part Z31	BUTTON HEAD SCREW (M8 X 20L)	RED
4	Z42	See sketch of part Z22	FLAT WASHER	RED
4	Z43	See sketch of part Z12	SPRING WASHER	RED
4	Z51	See sketch of part Z11	HEX HEAD SCREW (M5 X 12L)	GREEN
4	Z52	See sketch of part Z12	SPRING WASHER	GREEN
1	C12		CONSOLE FIX PLATE	
1			9 VOLT BATTERY	INCLUDED IN PACKAGING

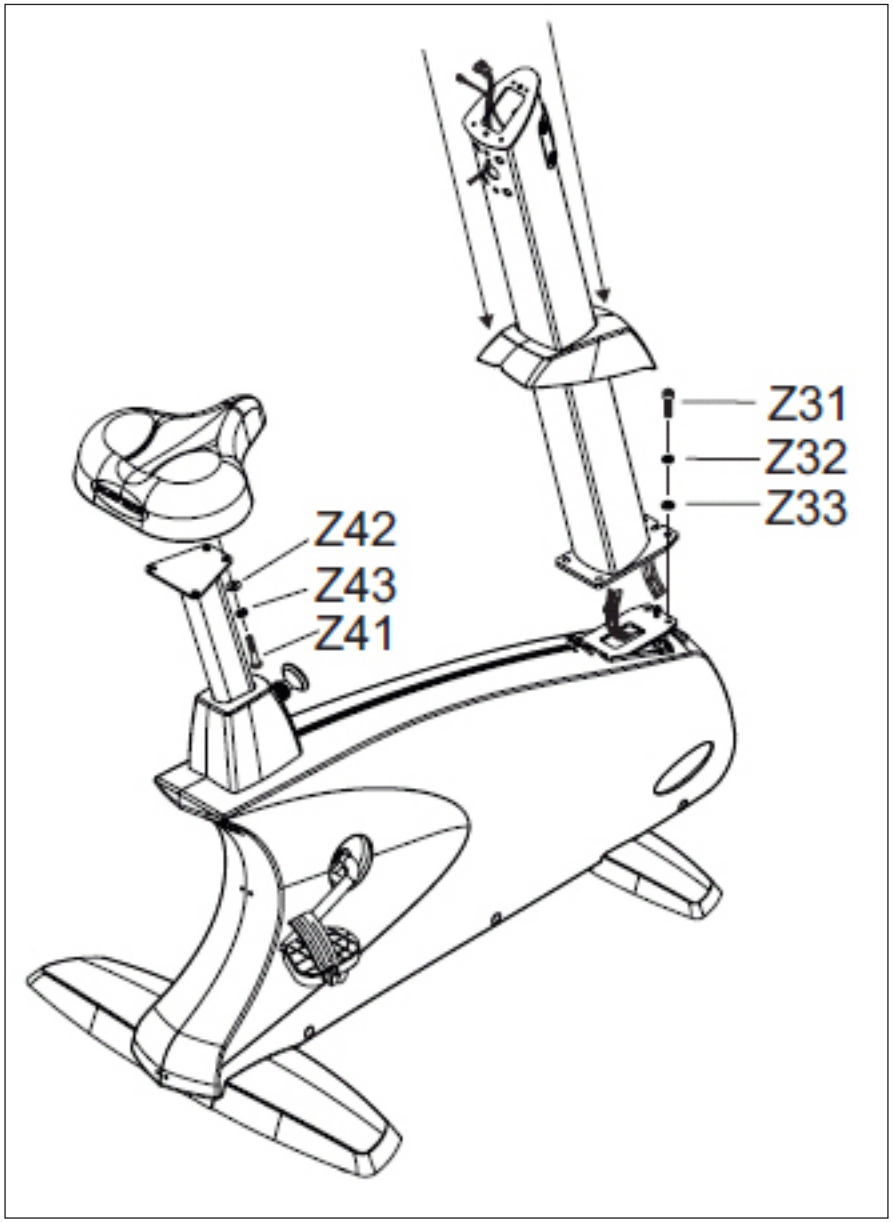
9.3 ASSEMBLY INSTRUCTIONS

AFTER THESE ASSEMBLY STEPS ARE COMPLETE, BE SURE TO SETUP AND TEST THE UNIT AS OUTLINED IN SECTION 8.20.

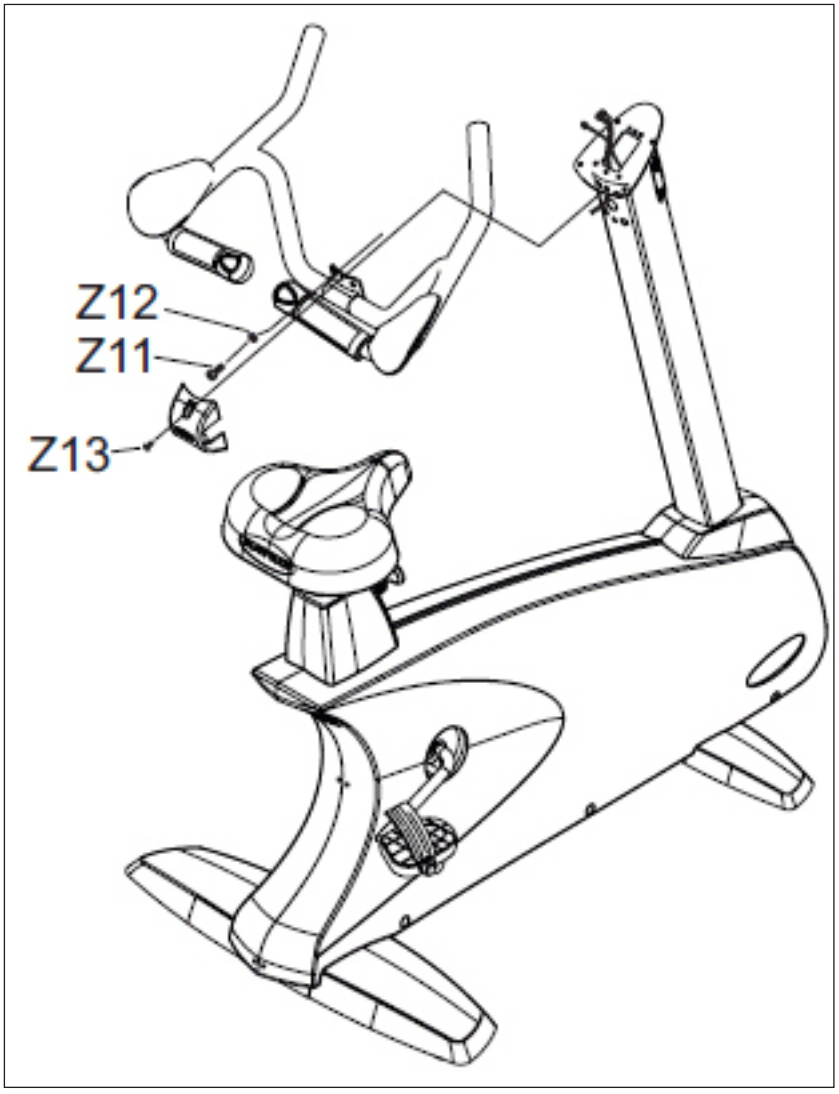
STEP 1



STEP 2

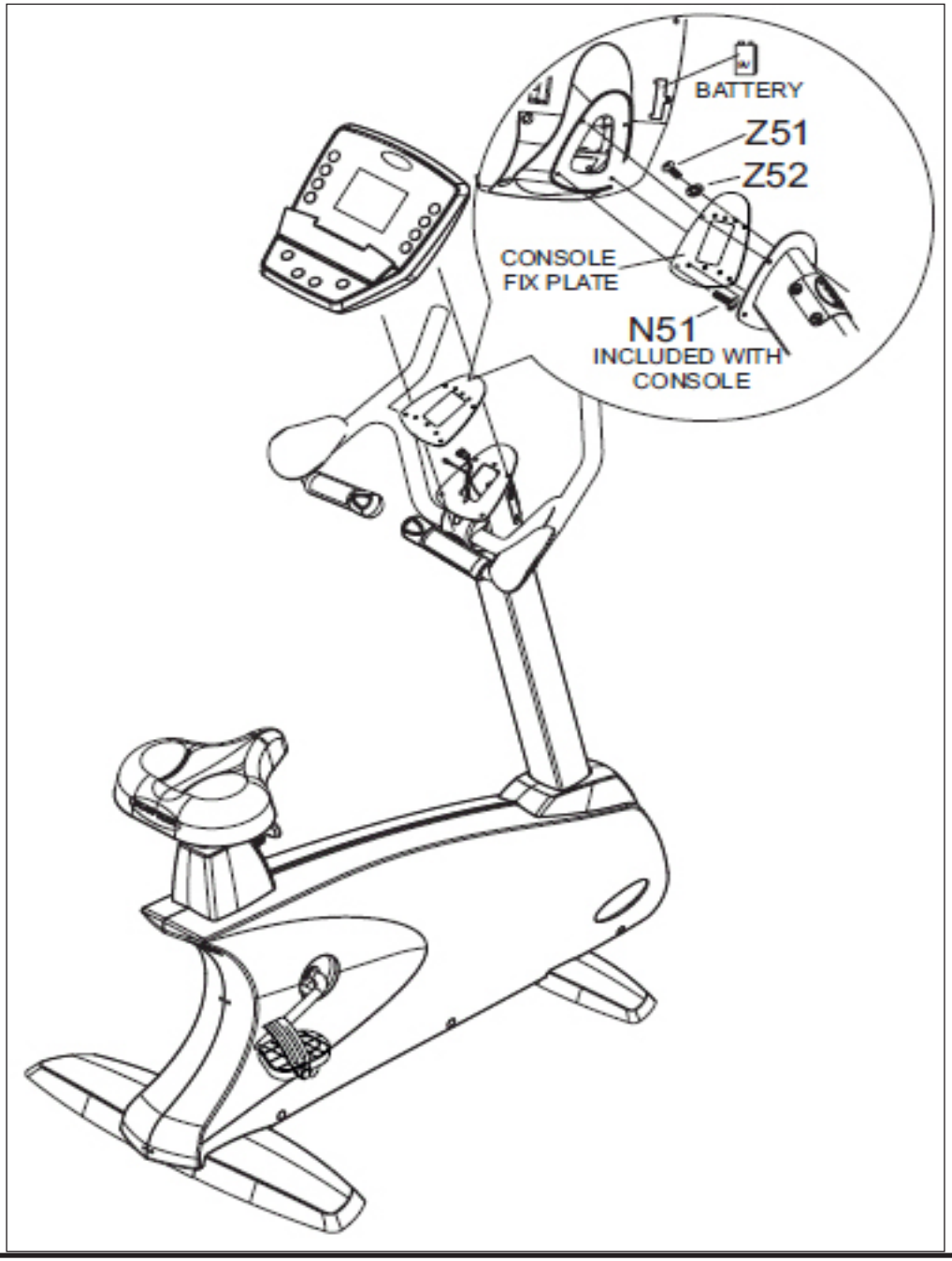


STEP 3

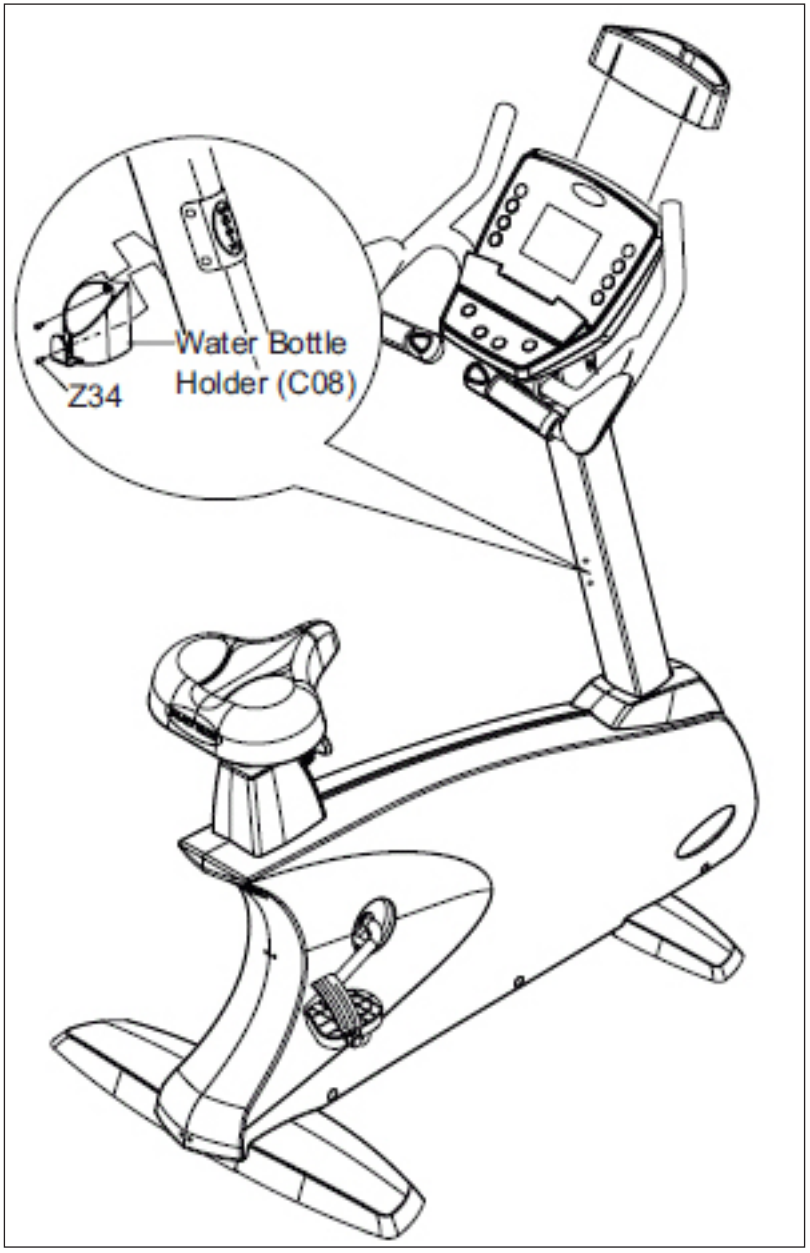


9.3 ASSEMBLY INSTRUCTIONS - CONTINUED

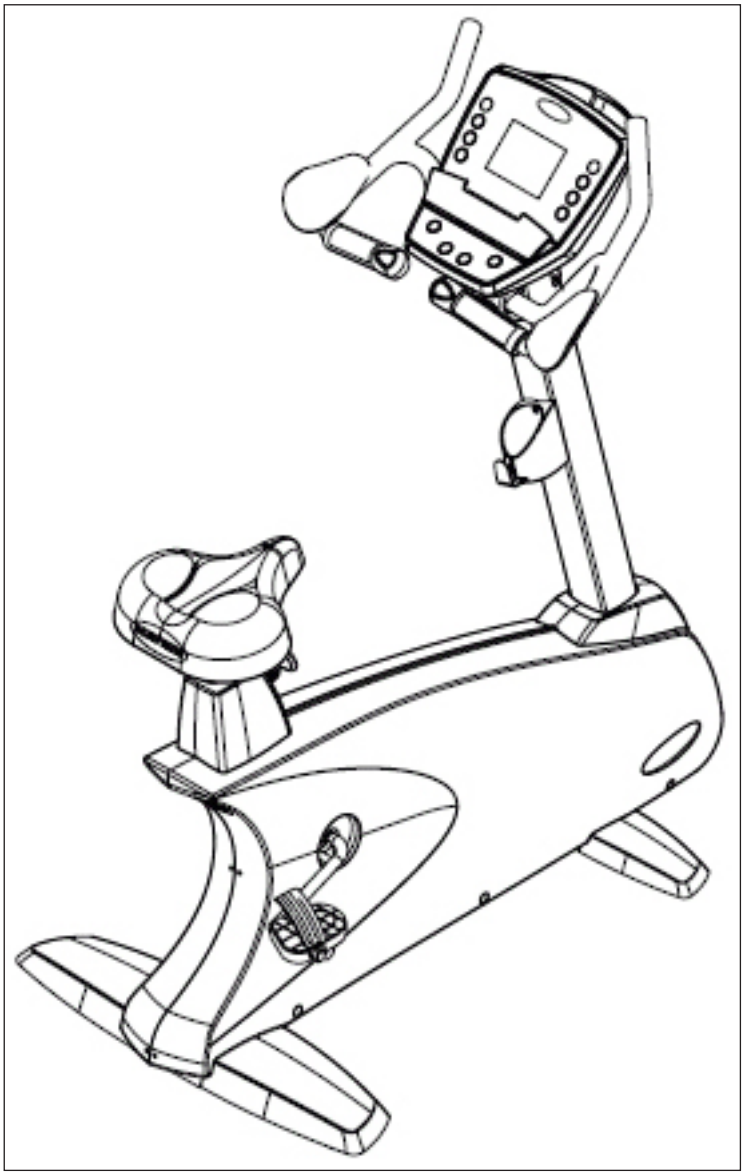
STEP 4



STEP 5



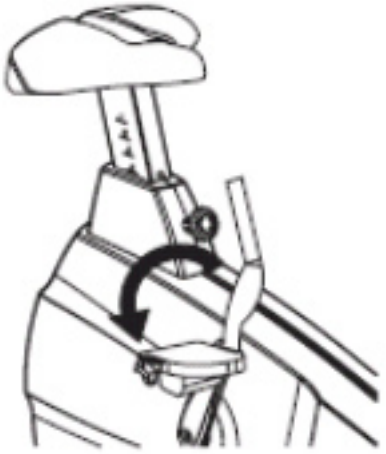
FINAL ASSEMBLY



9.4 ADJUSTING THE PEDAL STRAPS AND SEAT

ADJUSTING THE PEDAL STRAPS

The straps are designed to fit your individual foot size and should be adjusted tight enough to keep your foot from slipping. The pedals include spring loaded clips for easy adjustment. To tighten the strap, pull down the open end of the strap. To loosen the strap, push down on the top of the clip and pull the strap up. Release the clip to lock the strap in place.

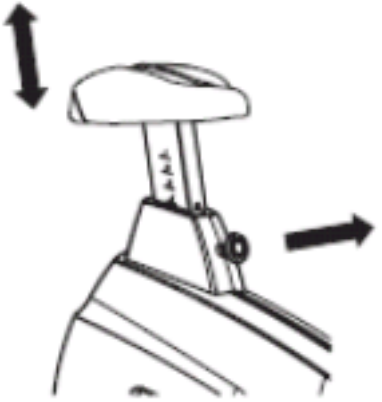


ADJUSTING THE U3x-01 SEAT

To determine whether or not the seat requires adjustment, sit on it and place your feet on the pedals. The user's knees should bend slightly when the pedal is at the lowest point of its rotation. It should be possible to pedal without locking the knees or shifting in the seat. The Matrix U3x-01 Bike features a vertical ratchet seat adjustment system, which makes it easy and safe to change the height of the seat quickly.

To raise the seat, pull the seat upward to the desired height, and let it lock into place. Test and re-adjust the seat height as necessary.

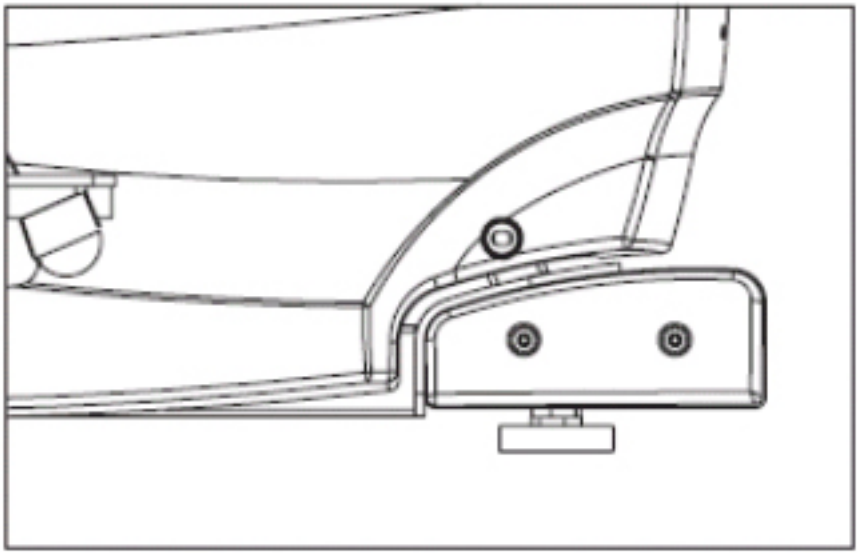
To lower the seat, first get off the bike. Holding the seat, pull out the yellow seat post knob. Let the seat slide down to the desired height and release the yellow seat post knob. Test and re-adjust the seat height as necessary.



9.5 LEVELING THE BIKE

STABILIZING THE MATRIX U3X-01 BIKE

After positioning the bike in its intended location, check its stability by attempting to shake it side to side. Shaking or wobbling indicates that your bike needs to be leveled. Determine which leveler is not resting completely on the floor. Loosen the nut with one hand to allow the leveler to rotate. Rotate the left or right leveler, and repeat the adjustment as necessary until the bike is stable. Lock the adjustment by tightening the nut against the rear foot support.



9.6 TV INSTALLATION INSTRUCTIONS

1) Remove the bracket, hardware, and TV from their boxes.
2) Pound the spring pin (found in the hardware bag) into the small hole in the TV bracket (Figure A). This is much easier to do before the bracket is installed on the bike.
3) Remove the Matrix Logo plate from the front of the console mast (Figure B).
4) Pull the coax and TV power wires through the hole in the front of the console mast. NOTE: You may need to remove the console to get these wires fished through the hole in the front of the console mast.
5) Attach the coax and TV power wires to the wiring running inside of the TV bracket (Figure C). You will need to use the male to male coax connector shipped in the hardware bag (Figure D).
6) Attach the TV bracket to the console mast using the 4 screws removed in Step 3 (Figure E).
7) Attach both of the long metal pieces (called rabbit ears) to the TV bracket using the long screw and nut found in the hardware bag (Figure F). The user's right side rabbit ear should be installed so that the spring pin lines up with a hole in the rabbit ear to limit the angle of adjustment of the TV (Figure G).
8) Attach the TV to the rabbit ears using 4 screws from the hardware bag (Figure H).
9) Attach the TV controller bracket to the front of the console. The TV controller bracket will mount using the 2 bottom screws holding the console to the console mast (Figure I).
10) Attach the TV controller to the TV controller bracket (Figure J).
11) Connect the TV power wire (Figure K), coax cable signal wire (Figure L), and controller wire (Figure M) to the back of the TV. NOTE: The controller wire will have a tag on both ends, one labeled controller, the other TV.
12) Connect the controller wire to the back of the TV controller (Figure N).
13) Install the cover onto the back of the TV (Figure O). NOTE: There is an extra cover shipped with the TV.
13) Run a coax cable to the base of the bike and plug it into the entertainment port (Figure P).
14) Plug in the TV power adaptor to a wall plug and into the entertainment port at the base of the bike (Figure Q).
15) Use the remote control sent with the TV to perform a channel search to program the TV (Figure R).
16) To perform a channel search, hit MENU, the right arrow once, hit the down arrow to Auto CH Search, and then ENTER. The TV will automatically search for both Analog and Digital channels.

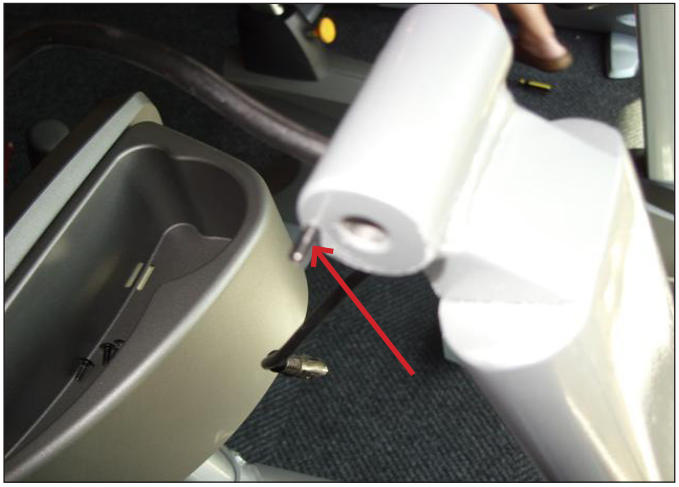


FIGURE A

FIGURE B

9.6 TV INSTALLATION INSTRUCTIONS - CONTINUED

FIGURE C

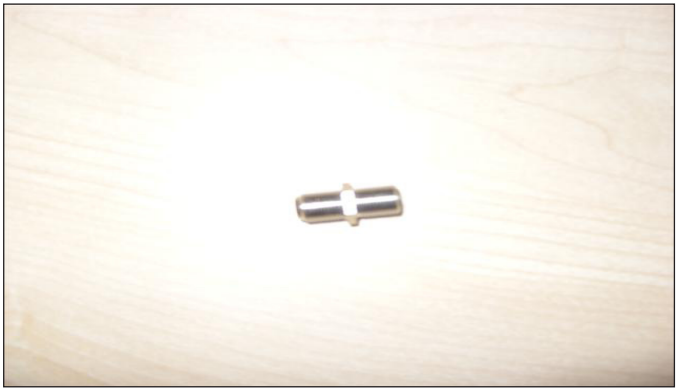


FIGURE D

FIGURE E

FIGURE F

FIGURE G

FIGURE H

9.6 TV INSTALLATION INSTRUCTIONS - CONTINUED

FIGURE I

FIGURE J

FIGURE K

FIGURE L

FIGURE M

FIGURE N

9.6 TV INSTALLATION INSTRUCTIONS - CONTINUED

FIGURE O

FIGURE P

FIGURE Q

FIGURE R

NOTES

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